

The CENTRAL AFRICAN JOURNAL OF MEDICINE

Dr. DAVID LIVINGSTONE

Vol. 3. No. 5

MAY, 1957

CONTENTS

ORIGINAL ARTICLES

Ephebiatrics in General Practice	<i>R. W. Fynn</i>	163
Male Infertility	<i>Dorrien Venn</i>	171
Intravenous Fluid Technique	<i>M. A. Kibel</i>	180
Fractures of Radial Head with Medial Displacement	<i>E. J. Nangle</i>	185
Dermatitis Gangrenosa Infantum	<i>M. Gelfand</i>	187
Fevers of Africa 6. — Leishmaniasis South of Sahara	<i>P. E. C. Manson-Bahr</i>	189
B.M.A. (Mashonaland) Evidence on Medical School		194

EDITORIALS

Epidemiology of Tuberculosis in the Belgian Congo and the Ruanda Urundi	199
Medical School Planning Committee	200
City of Salisbury Medical Report, 1955-56	201
B.C.G. Campaign in Eastern Districts	201
Twenty-one Years as M.O.H. to Salisbury	201
Dr. C. K. Joshi, M.B.E.	202
Salisbury Clinical Club	203
Obituary, L. E. W. Bevan, M.R.C.V.S.	201
Final Appeal for Prof. Drennan	
Presentation Fund	206
Correspondence	207
In Rhodesia Then	208
Book Reviews	209
The Journal Library	210
In the Federal Assembly	211
Latest Pharmaceutical Preparations	213

PUBLISHED MONTHLY, ANNUAL SUBSCRIPTION £2 2s. 0d.

Registered at the General Post Office as a Newspaper.

The Central African Journal of Medicine

Volume 3

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Ephebiatrics in General Practice

BY

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During his visit to Egypt in the 5th century B.C., Herodotus was sufficiently impressed by the variety of specialists in medicine to describe them at some length in his writings. In 2500 B.C. specialism in Egyptian medicine continued, although several specialities were often combined in one individual, such as the superintendent of the court physicians, by the name of Irj, who was "palace eye physician, palace physician of the belly, and guardian of the anus." (The royal anus required as much care in those days as it did at the time of Molière.)

Specialism may be a vertical division, as in the case of one organ (eyes), or one system



Fig. 1—*The Young Athenian Soldier or Ephebos* (from Sir Heneage Ogilvie's article).



Fig. 2—*The Discobolos* (copy of a bronze figure by Myron c. 450 B.C.).

(genito-urinary) or one tissue (skin) or one disease (tuberculosis). Or it may be horizontal, covering all the diseases in one particular age group as in paediatrics or in geriatrics.

The diseases, injuries and ailments of youth present an interesting study in general practice,

A paper read to the Clinical Club, Salisbury, November, 1956.

for which Sir Heneage Ogilvie of Guys Hospital coined the term "Ephebiatrics." The Ephebos was the Athenian youth called up for military service at the age of eighteen, and also applied to those attending the gymnasia and the academies of the philosophers, or what we would now call under-graduates, and covering the age group from eighteen to twenty-five.

So for eighteen years, through infancy ("mewling and puking in the nurse's arms") and childhood ("whining with his satchel and shining morning face, creeping like a snail unwillingly to school"), puberty and adolescence, our Ephebos has been taking in nourishment to build a body in some ways different from any other body. He has been receiving impressions, from them acquiring experience, and from experience building up character. This character will determine, in large part, whether he becomes a "rock 'n rolling Teddy Boy" or a modern saint, or just a normal decent citizen. Dr. Kurt Hahn, founder of Gordonstoun School (and previously of Salem school in Germany, until driven out by Hitler) says this of youth and character: "The modern youth is surrounded by three decays; the decay of adventure and enterprise; the decay of skill and care; and the decay of compassion and charity. Our educational system is chiefly concerned with the transmission of knowledge and accepts no responsibility for the training of character. It fails to equip the average boy with a willing body. It fails to introduce activities into a boy's life likely to make him discover his powers as a man of action."

So mainly, the Ephebos has been acquiring knowledge and storing it for future use. His body is now complete, his character is formed, and he is at his finest hour, and the summit of his capabilities. His frame is at its strongest, his mind at its most alert and his emotions at their most poignant. Athletic records have, almost without exception, been made by men and women between eighteen and twenty-five. The great deeds of daring and adventure, the finest compositions of imaginative music, the finest flights of lyric poetry, have, for the most part, come from those of this age group.

In the African, the Ephebos is represented by the young tribesman about to undergo admission to full adult life, which takes a variety of forms in the different tribes. This is both a testing and a proving time, as well as a general rounding-off of character training, important for the moral fibre of the youth himself, and for the tribe as a whole. The



Fig. 3—*The Stress of Being a Young Kenya Tribesman.*

Masai will send the Ephebos off on his own to complete a series of tasks, involving skill, courage, enterprise and self-reliance. The Mashona apparently have no initiation ceremonies. The Zulus used to send the youth in Shaka's time to tend the king's cattle (instead of their father's), at a military kraal, where they must drink milk squirted directly into their mouths from the cow's udder (a custom known as "kleza"). When sufficient numbers of these youths had accumulated at a kraal, they were formed by Shaka into a new regiment and fitted into his state army. Some of Shaka's curious but wise ideas included refusal to allow his warriors to marry until they had proved themselves in battle to his satisfaction; and that after killing in battle, a warrior must *sula izembe* (wipe the axe) or have intercourse according to the method of *uku-hlobonga* (or no penetration), with the first suitable unmarried girl who came his way, and who must submit to his request. Until this was done, the warrior was unclean and could not enter social life, return to his wife or drink any milk. This method of intercourse (*uku-hlobonga*) consisted of phallic contact at the clitoris, proceeding through the labia to the fourchette with

ejaculation on the perineum. Ensuing pregnancy resulted in death for both parties so it was not performed lightly, and in fact the Zulus in Shaka's time were apparently extremely moral in matters of sex. Shaka himself, however, was conceived in 1787 during lack of self-control during *uku-hlobonga*, and when his mother was reported to be pregnant, his father retorted that she was only harbouring "I-Shaka," an intestinal beetle, held both then and now to cause amenorrhoea. When delivered, his mother returned the message, saying "come and fetch your beetle."



Fig. 4—Shaka (drawn from Captain Shorey's portrait in *Shaka Zulu*, and a portrait in the *Diary of Henry Francis Fynn*).

The injuries and ailments of the Ephebos arise in his physical and psychological characters, in the circumstances he meets, and in his reactions to those circumstances. Hitherto sheltered and guided he sets out alone on the great adventure of life and seeks dangers to overcome them and difficulties to circumvent them. He is combative and intolerant, and supports lost causes that might give him the needed excuse for a fight against odds. "Jealous in honour, sudden and quick in quarrel, seeking the bubble reputation even in the cannon's mouth."

The skeleton shows the most striking physical characters of the Ephebos. The bones are now single units instead of sectional growing parts. There is no epiphyseal line and adjacent diaphysis in which most of the skeletal injuries and diseases of childhood originate. They are whole but keep for a few years the elasticity and vascularity of a child's bone, allowing them to spring rather than break. A twisting or a bending strain carried to the point of disruption producing an epiphyseal detachment or juxta epiphyseal fracture in a child, or a fractured shaft in an adult, will rupture the ligaments or dislocate the joint in an Ephebos. A compression stress that damages the articular ends in a child or adult, is more apt in a youth to damage the structures that lie between them. For instance the commonest age for a dislocated shoulder, elbow, hip, knee or ankle is the early twenties. Forcible abduction and external rotation of the foot on the leg, as occurs in walking on rough ground or in climbing where the boot may be wedged in a crack and the whole weight of the body transmitted to the fixed foot, produces an abduction fracture in an adult or often a dislocation at the ankle or mid-tarsal joints in the Ephebos, injuries seldom seen at any other age. A fall on an outstretched hand producing a fractured lower end of a radius in a child or a Colles fracture in an adult, will often produce the fractured scaphoid and dislocated lunate seen in under-graduates and servicemen. The strenuous exercises of the Ephebos impose a great strain on the knee joint, producing detached menisci or flaking off articular cartilage of the lower end of the femur so common at this age.

The medical stresses of sport deserve mention here if only because of the many misconceptions about them. Dr. Roger Bannister has pointed out the absurdity in the commonly held idea that sport produces more immunity against diseases, and also exploded the "burnt out



Fig. 5a—The Medical Stresses of Sport.

athlete" and "athlete's heart" errors. The enlarged heart of the athlete is physiological, not pathological. Hartley and Llewellyn, in a series of studies in 1939, concluded that "athletes and oarsmen live as long as their more sedentary contemporaries."

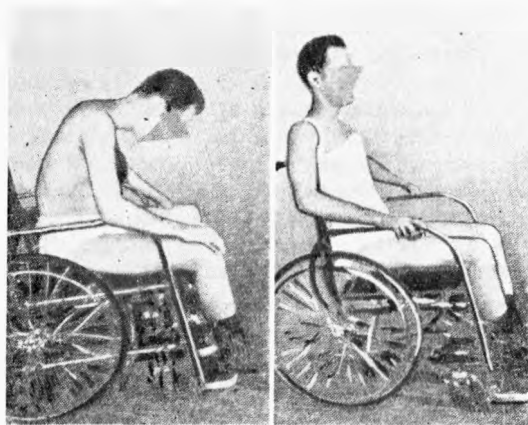


Fig. 5b—The Medical Stresses of Sport.

Bacteria will lodge more readily in the free blood supply of the bones of the young adult and are no longer carried away by the articular network to the diaphysis, but by the main nutrient artery to the shaft, with a resulting osteomyelitis that is less acute and less rapid than that arising in the diaphysis. Pain in the shaft, followed by pain after a few days or weeks, with patchy rarefaction in the X-ray together with deposits of new periosteal bone may resemble osteogenic sarcoma.

Sir William Osler, incidentally, sustained a blow on a shin at rugby in 1866 when he was 17, resulting in osteomyelitis necessitating several weeks in bed. During this time Harvey Cushing tells us, "he sat much in the Warden's study where the microscopical specimens were prepared, and had long talks with him, arousing his interest in the microscope."



Fig. 6—A "Burnt out Athlete"?

Leaving the sheltered world of home, the Ephebos sets out, unprotected and unrestrained, to explore the universe, to meet with adventures and disasters, psychological, amorous and physical. He sets out with an exaggerated idea of his own importance, and bumps up against countless other egos equally important to their owners and in the clash and conflict of egos, it gets battered, dented and soiled. It may survive in its original form with the corners rounded off; it may be withdrawn, reconditioned and reissued in a more serviceable form; or it may be damaged beyond repair, in which case he must put up an elaborate facade to hide its deficiencies. Functional illnesses of all kinds — hysterical paralysis or blindness, abdominal crises with all the symptoms of a surgical emergency, swallowed safety pins and hair-grips, self-inflicted injuries — are all found in young people, especially young women who have just plunged into the seas of life and found the water too cold.

The injuries of love are chiefly psychological — “the lover sighing like a furnace with a woeful ballad made to his mistress’ eyebrow” — but

the diseases of love are coccal, bacterial, spirochaetal or viral, with their maximum incidence in youth. Gonorrhoea, incidentally is recorded 6,000 years ago in Mesopotamia, in Sumerian times on an Assyrian tablet which reads, “If a man in his sleep or his walking has seminal discharge thou shalt mix in oil clay of the dust of mountain stone and horned alkali. Pour it on the man’s sore. In oil and wine thou shalt mix it and he shall drink it and recover.” It still appears undecided, however, whether syphilis was indigenous to America and brought back to Europe by Columbus, or whether it existed in Europe since remote antiquity. The only doubtful evidence of syphilis in ancient Egypt has since been discovered to have been caused by post-mortem beetles producing erosions resembling syphilitic lesions.

The marriage problems of the Ephebos brought to the general practitioner are many, not the least of which is the problem of infertility or sterility. The android female often marrying the gynecoid male distributes at least five of the forty factors Meaker has described causing an infertile marriage between both partners, and

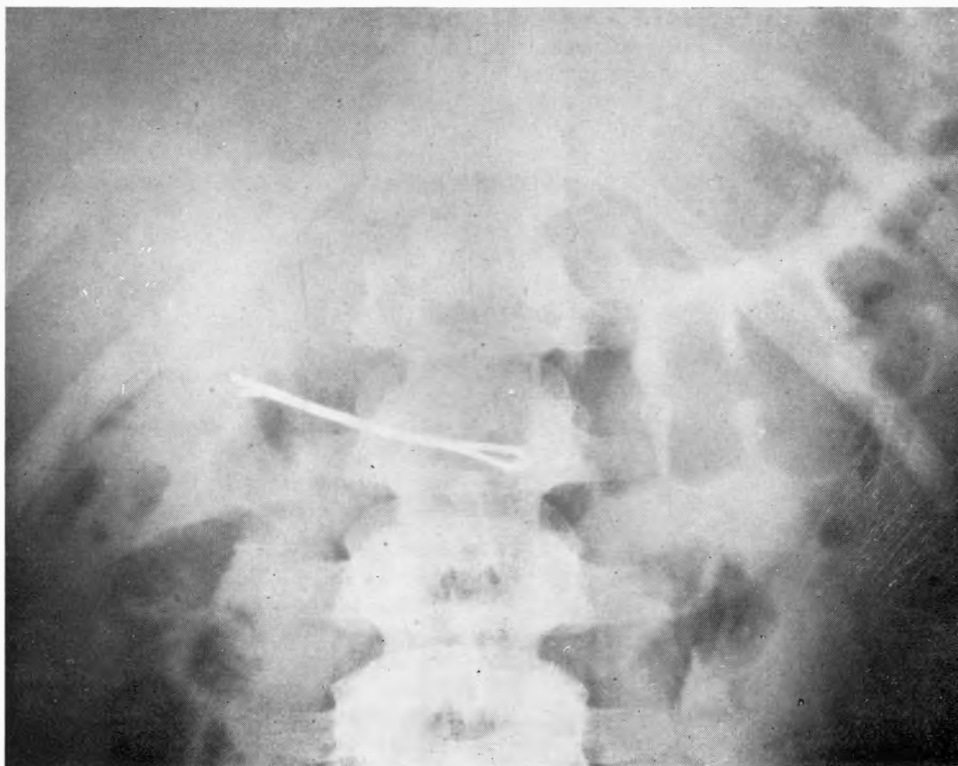


Fig. 7—A Hair Grip swallowed purposely by a Young Woman.

therefore it is the marriage that must be regarded as sterile rather than either the husband or the wife. Mathews Duncan suggests investigating after four years of infertile married life, and Meaker suggests after one year, but the anxious and well-read type of female often presses the general practitioner into over-elaborate investigating too soon. Ignorance of either partner or both, results in 5 per cent. of marriages remaining unconsummated. Vaginismus (commonest in girls conditioned in infancy to expect pain from external manipulations such as soapsticks and enemata) and rigidity of the hymen, hypoplastic genitalia or congenital abnormalities increase any underlying difficulties. Inadequacy of sperm and mechanical difficulties in the female tract (such as uterine and tubal spasm or occlusion or congenital malformations) must be correctly analysed. One of the most informative and least troublesome tests, giving information on both partners, and yet comparatively neglected, is the so-called Huhner's test or post-coital test. Marion Sims described this test one hundred years ago, but it became submerged in Victorian prudery until Huhner resuscitated it early this century. The test shows how the spermatozoa act in the female passages and especially in the cervical plug at different times in the menstrual cycle. The post-coital salpingogram in these cases often supplies the reason and the answer for some cases of infertility. A correct interpretation of the salpingogram is, however, impossible unless screening is carried out at the time to determine uterine and tubal spasm, which may otherwise

be missed. Neither atropine nor an anaesthetic will abolish this spasm, although 1/100th gr. nitroglycerin half an hour before the test will do so, revealing patent tubes previously thought to have been blocked.

The neuroses arising in the young celibate male whose chastity comes from fear of either scandal or of women, is possibly exaggerated, although society, quite rightly, imposes an unnatural chastity on the young man who could not support a family, nor have the judgment of good choice. The ancient Egyptians allowed marriage at about thirteen, or in fact from the time they felt the urge for sex relations, and so they escaped the frustrations of modern society. Some of the greatest love romances in history occurred between men and women we would now regard as sexually immature and would be treated as juvenile delinquents and sent to approved schools. Achilles was only fourteen when his affair with Deidamia eventuated in a son; Romeo and Juliet were also only fourteen; Helen married at 12. Daphnis at 15 and Chloe at 13.

Before he became determinedly heterosexual with a choice selection of wives, David's cry to his youthful friend Jonathon—"Thy love to me was wonderful, passing the love of women"—revealed his homosexual tendencies. As this problem rears its ugly head more frequently, we remain unable to do anything more than segregate the offenders with this most contagious of diseases. In a series of cases examined in prison, East and Hubert found that seduction in early youth of childhood was the commonest single environment factor, and that the "pretty boys" only became offenders after being seduced themselves, and not because of an effeminate constitution. The idea that a practising homosexual can be perfectly high-minded in other respects is, of course, a carefully fostered illusion. It can be aggravated by syphilis as in the case of Oscar Wilde, or tuberculosis or alcohol. Hostile public opinion and ridicule do more good than sermons.

The overaction of some normal mechanism in young people of more than average intelligence who are exposed for long periods to emotional tension, produces a high incidence of stress diseases which are perhaps among the most characteristic and urgent of the problem in Ephebiatrics. This purpose-

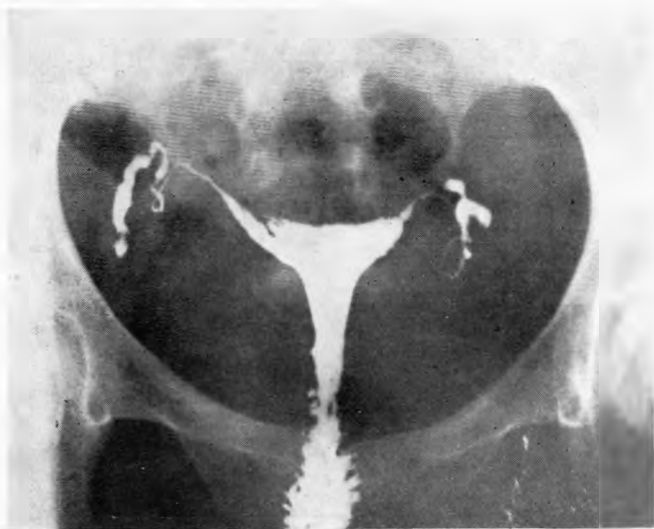


Fig. 8—*The Last Subfertile Investigation.*

less overaction of the normal hormonal mechanism explains thyrotoxicosis; of the normal control of the alimentary tract—achalasia and duodenal ulcer; and the normal mechanism of inflammation—ulcerative colitis, rheumatoid arthritis and neurogenic eczema. The allergics fall partly into this group and into Ephebiatrics as the eczema of babies is succeeded by the asthma of the seven to fifteen-year group, to become the hay fevers of the 20-40 year group.

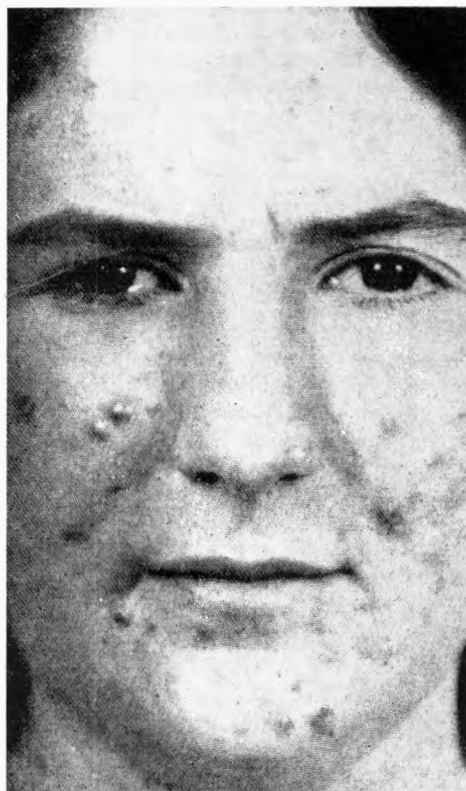


Fig. 9—So Common in the Ephebos Acne.

[By courtesy of Smith, Kline & French International Company.

A disease producing anguish, in one case of mine to a point of near-suicide, is acne, so common in the Ephebos, but not in those who blush readily. The androgens and progesterone at puberty cause an increase in size and activity of the sebaceous glands, although in those with acne after puberty there is no increase in the urinary 17-keto-steroids. Diagnosis is usually easy but should not be made in the absence of comedones, because similar lesions are caused by oils and tar, chlorinated naphthalene, and iodide and bromide rashes.

One of the problems of Ephebiatrics confronting the general practitioner is advising youths handicapped in various ways how to earn a living within their limitations. I refer to the crippled child with congenital deformities of spine and limbs, or suffering from birth paralysis, or Perthe's disease or coxa vara; or the blind—mostly congenital and developmental now that smallpox and purulent conjunctivitis are controlled, arising from maternal rubella, and retrolental fibroplasia; the spastic and the epileptic; the cardiac cripple, who, although surgery now offers complete cure to most patients with a patent ductus arteriosus and coarctation of the aorta, in some rheumatic patients, must be restricted in their activity; those affected by poliomyelitis in whom the most serious disability seems to me to be the growth of self-pity.

To most of these, the motto of the Worcester College for the Blind provides an important attitude — "*possunt quia posse videntur*" — ("expect great things of them, and you will put them on their mettle").



Fig. 10—"Possunt Quia Posse Videntur."

[By courtesy of "Realities."

Most of the diseases of the Ephebos are curable and will pay dividends for 50 years. The congenital malformations lie in the past, the degenerative diseases and cancers are, for the most part, yet to come. The Ephebic



Fig. 11—"Youth's a Stuff will not Endure"
(Rodin's "Child of the Century").

ailments are mainly temporary derangements in a body that is basically healthy, which a Greek philosopher named Pericles in 400 B.C. defined as that "state of moral, mental and physical well-being which enables a man to face any crisis in life with the utmost facility and grace." Achieving this is so much easier when young and the forces of nature and will of the patient are fighting on the side of the Ephebiatrist. However, as Shakespeare remarked, "Youth's a stuff will not endure."

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